

ARTICLE XII Berm Regulations and Design Standards

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Sec. 16-12-10. Policy statement and applicability.

It is the purpose and intent of the Town to ensure that all berms are constructed and landscaped to appear as consistent as possible with the natural landscaping of the existing natural areas within the Town. All berms that are to be constructed that are greater than two (2) feet in height (as measured from original ground level), or larger than four hundred (400) square feet of surface area, shall require submittal and approval of an application for such construction from the Planning and Zoning Commission.

(Ord. 05-08 §2)

Sec. 16-12-20. Design standards.

All berms within the Town shall be designed and constructed in accordance with the following design standards:

- (1) Maximum height of berms shall not exceed eight (8) feet, as measured from existing grade to the top of the crown of the berm.
- (2) Maximum slope of the berm shall not be greater than one to two (1:2) as a vertical rise to horizontal run.
- (3) Berms shall be designed with both horizontal and vertical undulations so that the top of the berm undulates and so that the sides of the berm form a serpentine-like pattern. Vertical undulations shall be at least fifty percent (50%) of the maximum height. Horizontal undulations shall be at least twenty-five percent (25%) of the maximum width. The Planning and Zoning Commission shall review all berm plans for approval to ensure that there are enough horizontal and vertical undulations to make the berm naturally appearing to be consistent with the natural surroundings.
- (4) Berms shall be tied into existing grades along the entire length of their perimeter to ensure that berms are naturally appearing.
- (5) Berms along property lines shall not be longer than two-thirds ($\frac{2}{3}$) of the length of the property line they adjoin (as measured from the toe of the slope at each end of the berm). This length shall be measured only along portions of the berm over two (2) feet in height. Adjacent property owners may propose to build one (1) longer berm along the length of the adjacent properties, provided that the overall length does not exceed two-thirds ($\frac{2}{3}$) of the combined lot length that the berm adjoins.
- (6) Berms shall be compacted prior to planting, landscaping or revegetation.

- (7) Berms shall be landscaped in their entirety at final grade with at least two (2) inches of topsoil. If topsoil is not used, the applicant may use two (2) inches of mulch (straw, hay, wood cellulose, etc.) prior to seeding. The top soil or mulch must be tilled at least four (4) inches deep into the soil prior to seeding. Straw and hay shall be certified as free of noxious weeds and shall not be in a state of decomposition so as to smother or retard the growth of natural grasses or groundcovers used by the applicant. Naturally occurring materials should be used throughout the berm site, such as natural logs, stumps, decorative dead trees and larger rocks of varying sizes or other naturally occurring materials. The entire berm area shall be landscaped with grass, shrubs, perennials, groundcovers, annuals and trees. It is the applicant's responsibility to ensure that the landscaped ground surface, as if viewed from above, covers at least eighty percent (80%) of the ground surface in a uniform manner, with no sizable bare spots. The groundcovers shall be free from weeds as identified by the County as invasive, noxious or otherwise nuisance weed species. The establishment and maintenance of revegetation is the responsibility of the applicant on both a short- and long-term basis; or of any new property owner if the property is transferred. Plantings of grass, groundcovers or flower seeds shall occur within ten (10) days following the surface soil preparation.
- (8) Naturally occurring trees shall not be "buried" or incorporated within the berm so as to cause the trees to die unnaturally from piling up and stacking of soils above and around the natural ground level surrounding the tree trunks.
- (9) All seed mixes, trees and shrubs, perennials, groundcovers and annuals shall conform to the Summit County Land Use and Development Code (Appendix 3-2), Required Plant Materials List (see Appendix 16-A of this Chapter). This Appendix lists species of plants, shrubs and mixes to assist the applicant with proven plants for use at the Town's high altitude and in limited growing conditions (semi-arid environment, short growing season, short frost-free period, extremely cold winters, etc.). The applicant shall take into consideration if there are proper water rights for use on the landscaped areas in case additional water is necessary for supplementing natural precipitation. The aforementioned Appendix lists types of vegetation to use for three (3) different ranges of precipitation.
- (10) Landscaping of all berms shall take into account and be designed to be protected from snow storage areas and from snow sliding off of roofs. Hardy landscaping plants that will not be damaged by snow storage shall be located in those areas so affected by snow piled upon or against the berm.

(Ord. 05-08 §2)

Sec. 16-12-30. Permit required; financial guarantee.

- (a) A permit for the construction of a berm is required. Such permit may be issued upon approval of the Planning and Zoning Commission and payment of the permit fee in the amount of one hundred dollars (\$100.00). Such permit will expire eighteen (18) months after issuance.
- (b) A financial guarantee in the form of a cash bond, in an amount to be determined by the Planning and Zoning Commission based upon cost estimates, shall be paid to the Town, prior to the issuance of a permit to construct a berm. Such bond will be refunded upon approval by the Town of the full completion of the construction of the berm, including required landscaping. The Town shall hold these funds in a non-interest-bearing account. The funds may be commingled with other Town funds. If the construction of the berm, including landscaping, is not completed within eighteen (18) months from the date of issuance of the permit, the Town may contract for the completion, including landscaping, and deduct any incurred expenses from the bond. Any unused funds shall be returned to the applicant upon final completion of the berm, including landscaping.

(Ord. 05-08 §2)

Sec. 16-12-40. Contents and timing of application.

- (a) The berm construction and landscaping application shall include at a minimum the following items:
 - (1) Property address and name and address of the owner of the property; depiction of property lines, easements, structures, driveways, snow storage areas and utilities; location of berms; proposed revegetation materials to be used; and, if requested by the Planning and Zoning Commission, an Improvement Location Certificate (ILC).
 - (2) A sketch of the proposed berm, with items shown as close to scale as possible (including the placement of the listed materials, along with any natural materials used, such as trees, stumps, large rocks, etc.), together with a narrative describing the project and an estimated time of completion.
- (b) Additional plans and details may be required by the Planning and Zoning Commission after review of the scope and size of the submitted application and plans.
- (c) All plans and applications shall be submitted to the Building Official at least fourteen (14) business days prior to the next regularly scheduled Planning and Zoning Commission meeting in order to be placed on that meeting agenda. Applications and plans must be complete when submitted, as determined by the Building Official, in order to be scheduled and reviewed by the Planning and Zoning Commission.

(Ord. 05-08 §2)

Sec. 16-12-50. Inspection of berm.

The berm shall be inspected by the Building Official, and approval of the construction, including landscaping, shall be given unless the Building Official determines that construction of the berm is not in accordance with the requirements of this Article. Any determination of the Building Official may be appealed to the Planning and Zoning Commission, provided that notice of such appeal is presented in writing to the Town Clerk within ten (10) days of the action to be appealed.

(Ord. 05-08 §2)

Sec. 16-12-60. Sight distance triangle.

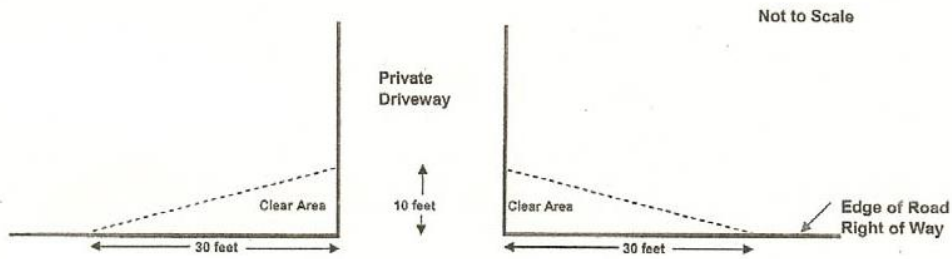
For safety and visibility purposes, a sight distance triangle shall be maintained at all street intersections and where driveways intersect Town streets (See Figure 1). The length of the legs and the method of measurement shall be as stated in Chapter 5 of the Summit County Road Standards. No landscape materials, earth berming or other visual obstructions between three (3) feet and eight (8) feet shall be allowed within this sight distance triangle. In the case of any new driveway accessing Colorado State Highway 9, the property owner shall first obtain a permit approval from the Colorado Department of Transportation (CDOT), Region One (303-757-9123). As a general rule, the CDOT provisions call for a "sight distance triangle" of ten (10) feet (from the edge of State Highway 9 right-of-way into and along the driveway accessing Highway 9), by four hundred (400) feet, minimum, along the road length of Highway 9 (See Figure 2). In this example, this ten-foot-by-four-hundred-foot triangle must not have any objects interfering with a line of sight from a height of twenty-seven (27) inches above the ground. CDOT uses the American Association of State Highway Traffic Official codes (AASHTO) to determine the exact dimensions of the triangle when a property owner applies for a state access permit, taking into account posted speeds, traffic density, road slopes, etc. In the case of existing berms or other objects that may be within the sight distance triangle within existing access driveways or roads that intersect Colorado State Highway 9, the Town may request CDOT to determine if said existing driveways or roads conform to the current AASHTO codes. If not, the property owner may be required to comply with state minimum standards within a reasonable time period. This regulation is a highway safety measure and is not

intended to prohibit the planting of trees or retention of existing trees in the sight distance triangle, if they are pruned so that all branches are higher than seven (7) feet as measured from the ground surface.

(Ord. 05-08 §2)



Figure 1- Typical "Sight Distance Triangle"



Town of Blue River Road

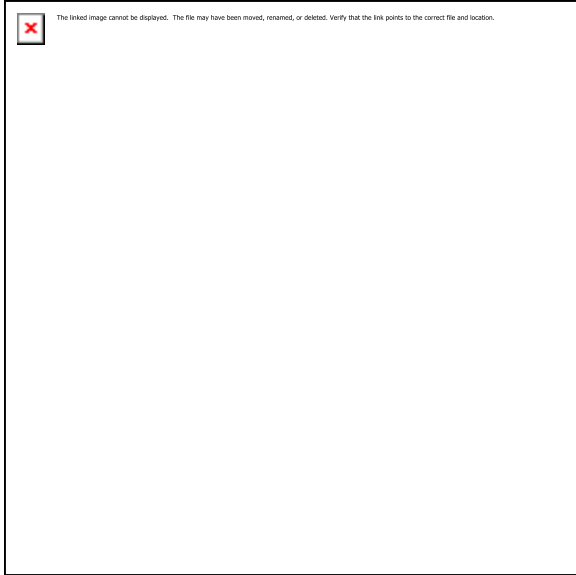
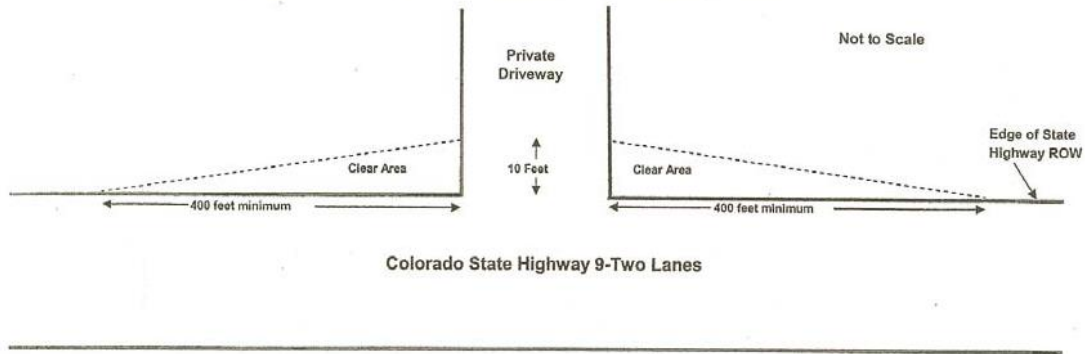


Figure 2 Example of "Sight Distance Triangle"
Based upon AASHTO State Guidelines used by CDOT for Driveway Access



Sec. 16-12-70. Existing berms.

Berms constructed prior to the adoption of the ordinance codified herein must be brought into compliance within one (1) year after the effective date of said ordinance. The Planning and Zoning Commission will notify each property owner to submit a plan which will be reviewed, with the goal of minimizing any further earth disturbance or excavation. It is the intent of this Section to cause all existing berms to be landscaped with suggested vegetation as closely as possible to the requirements of this Article, utilizing grasses, shrubs, trees or other naturally occurring materials. Existing berm heights and all side slopes may be approved for existing berms as a variance in order to minimize disturbances on a site-specific basis. In the case of existing berms that appear not to meet CDOT sight distance triangle provisions for access to Colorado State Highway 9, the Town may request CDOT to evaluate the site for compliance with state regulations for highway access.

(Ord. 05-08 §2)

Sec. 16-12-80. Variances.

Variances may be granted by the Planning and Zoning Commission for any existing or new berm in accordance with Chapter 16, Article XI of this Code.

